Kwanyoung Park

✉ williampark202@gmail.com   🏠 https://kwanyoungpark.github.io
 https://github.com/kwanyoungpark

EDUCATION

Seoul National University   Mar '19 - Present
B.S. in Computer Science & Engineering   GPA: 3.97 / 4.3
B.S. in Mathematical Sciences (Minor)
* Leave of absence for military service: July 2021 - Jan 2023

Stanford University   Jun '23 - Aug '23
Visiting student   GPA: 4.0 / 4.0

Gyeonggi Science High School   Mar '16 - Feb '19
High school for gifted students in science and mathematics

RESEARCH INTERESTS

- Offline reinforcement learning
- Unsupervised reinforcement learning
- Robot learning
- Machine learning

PUBLICATIONS AND PREPRINTS (* denotes equal contribution.)

1. **Kwanyoung Park**, Youngwoon Lee
   Tackling Long-Horizon Tasks with Model-based Offline Reinforcement Learning
   Preprint, 2024 (submitted to **NeurIPS, 2024**)

2. Junik Bae, **Kwanyoung Park**, Youngwoon Lee
   TLDR: Unsupervised Goal-Conditioned RL via Temporal Distance-Aware Representations
   Conference on Robot Learning **(CoRL), 2024**

3. **Kwanyoung Park***, Hyunseok Oh*, Youngki Lee
   VECA: A New Benchmark and Toolkit for General Cognitive Development
   AAAI Conference on Artificial Intelligence **(AAAI), 2022**
   (Oral presentation, Acceptance Rate: 384/9,251 = 4.15%)

4. Junseok Park, **Kwanyoung Park**, Hyunseok Oh, Ganghun Lee, Minsu Lee, Youngki Lee,
   Byoung-Tak Zhang
   Toddler-Guidance Learning: Impacts of Critical Period on Multimodal AI Agents
   ACM International Conference on Multimodal Interaction **(ICMI), 2021**
   (Oral presentation)

5. **Kwanyoung Park**, Junseok Park, Hyunseok Oh, Byoung-Tak Zhang, Youngki Lee
   Learning Task-agnostic Representation via Toddler-inspired Learning
   NeurIPS 2020 Workshop on BabyMind, 2020

SCHOLARSHIPS

Presidential Science Scholarship   Mar '19 - Present
- Korea Student Aid Foundation (KOSAF)
- Full tuition, living expenses support for undergraduate studies.

Gyeonggi-do Special Scholarship (Science Technology)   Mar '16 - Feb '19
- Gyeonggi-do
- Full-ride scholarship

AWARDS

2023 | **Special Award**, MAICON 2023 (Military AI Competition)

2022 | **Special Award**, MAICON 2022 (Military AI Competition)

2018 | **Honorable Mention**, IMMC (International Mathematical Modeling Challenge)

2018 | **Bronze Prize**, Samsung Humantech Paper Award (Advisor: Hyunju Ju)
Modeling a Remora-Inspired Sucker Structure for Ship Flood Prevention Pads

2015 | **1st place**, KOI (Korea Olympiad in Informatics)

EXPERIENCE

Yonsei RL Lab   Jan '24 - Present
- Undergraduate Research Intern (Advisor: Youngwoon Lee)
- Researching on offline model-based reinforcement learning algorithms that can tackle long-horizon tasks [1].
- Participated in research on a goal-conditioned unsupervised RL algorithm that utilizes temporal distances [2].

SNU Human-Centered Computer Systems Lab   Feb '23 - Dec '23
- Undergraduate Research Intern (Advisor: Youngki Lee)
- Researched on a NeRF model architecture (with Gaussian Splatting) that can reduce network consumption for on-device applications.

Ministry of National Defense   Jul '21 - Jan '23
- Research Engineer (Military Service)
- Worked as main developer of an NLP project
- Trained a BERT-based model for Korean language and fine-tuned it for sentence generation.

SNU Human-Centered Computer Systems Lab   Jun '19 - Jun '21
- Undergraduate Research Intern (Advisor: Youngki Lee)
- Developed VECA, which is the first benchmark to assess the overall cognitive development of an AI agent, including a toolkit to generate diverse and distinct cognitive tasks [3].
- Researched the impact of guidance (e.g. offline trajectory, dense rewards) during reinforcement learning and its performance on transfer learning [4].
- Developed a representation learning algorithm based on the agents interaction using VECA [5].

SKILLS

Programming Language
- C, C++, Python (Pytorch, Tensorflow, Jax), C# (Unity), Java

Machine Learning
- Reinforcement learning, Vision, 3D geometry (NeRF), NLP

Languages
- Korean: Native
- English: Proficient (GRE: 163/170 (Verbal), 169/170 (Quant), 4.5/6.0 (Writing))
- Japanese: Proficient (JLPT N1: 168/180)